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ABSTRACT

Part of a collection of papers commissioned by Foundations, a project designed to identify the career development needs of postsecondary hearing impaired students, this paper examines the use of mentors as a teaching strategy. The initial section reviews historical aspects of the reintroduction of mentors in modern education. Three major forms of teaching--lecturing, didactic, and evocative teaching modes--are analyzed. Section 2 reviews the mentorship experiment underway for the past 10 years at Empire State College. The mentor role emphasizes advisement, intellectual development, and evaluation. The mentor/student relationship is addressed and findings from research on mentorship are reviewed. The central features of caring, knowing, trust, patience, and courage in the student/mentor relationship are examined. Implications for hearing impaired students are considered in a discussion of a program at Empire State College directed to hearing impaired students. Recommendations for designing and establishing a mentor position at the National Technical Institute for the Deaf are offered. (CL)

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Primary Mentoring as a Teaching Strategy

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Primary Mentoring as a Teaching Strategy

In doing a literature review for NTID's Foundations Program it should be noted that there is not a great deal of published material on mentoring per se. What there is seems to fall into three categories: general studies in non-traditional education; studies on mentoring and mentor-like roles at specific colleges; and studies on specific aspects of non-traditional learning, for example, contract learning. To facilitate the readers' knowledge of the literature in these areas I have included an annotated bibliography of the most important sources at the end of this essay.

Since the main purpose of this project is to articulate the essential characteristics of mentoring to the Foundations Program so that the role might be adapted to an already existing "traditional" structure, it was felt that a mere literature review would not convey that information. Therefore, this paper is in the form of a narrative essay incorporating characteristic examples of all three categories of the literature in its development. Part I deals with some historical developments in educational philosophy focusing on the reintroduction of the mentor in modern education. Part II combines some current research of mine with an elucidation of the principles of caring to create a new definition of mentoring. Part III deals with applications of the mentor role articulated in this essay to a hearing impaired population of students.

The reader may wonder why this essay centers on Empire State College. The reason is that ESC is the most studied college employing the mentor role as its only faculty position. Any study of mentoring would have to include this experiment prominently for quite clearly ESC has been the main laboratory for mentoring over the last ten years. If there is an overall object of this essay it is precisely to distill and liberate a general concept of mentoring from that laboratory.

Mentoring in a Modern Behavioral Environment

American higher education is in a critical phase in its own evolution; infused with money and social status since the Second World War, the enormous growth of the university has generated a reaction within, the student movement of the 1960's. To the serious educator these two forces have compelled an examination of the structure of the modern university along with the foundations of education itself. A synthesis of these two forces is a way to articulate the educational possibilities within the social structure of the modern university. In examining the evolution of teaching strategies within this behavioral environment, mentoring emerges as one of the most exciting possibilities.

There is at least one mythical teacher/pupil relationship in Western mythology, mentoring, and it has a finite origin in the literature, Homer's Odyssey. Mentoring is not only a concept in the Odyssey, but Mentor appears as a mythical character on the same order as Odysseus or Athene. Mentor is Odysseus' boyhood companion whom he leaves behind in charge of the education

and training of his son, Telemachus, during the Trojan War. Odysseus' absence lasted nineteen years so Mentor had enormous influence over Telemachus' development.

For our purposes, two observations are important in terms of Mentor's relationship with Telemachus. First, Mentor was a parent substitute. His function was to assume the role of Odysseus as a father, and Odysseus was everything the Greeks aspired to in an adult man: wise ruler, valiant fighter and strategist (he was called the sacker of cities), expert craftsperson, and even trickster. That this is a successful endeavor, we know from the developments in the Odyssey for we witness the passage of Telemachus into adulthood, and by the end of the book he is almost the equal of Odysseus himself. The modern definition of "mentoring" is thus "a wise and trusted counselor" (O.E.D.).

Second, this educational relationship was, by definition, aristocratic. In order to facilitate Telemachus's development, a one-to-one relationship was established whereby the teacher had only one pupil. Such a role was only possible with noble birth and an extensive estate, and these remained the conditions necessary for a one-to-one educational relationship until modern t mes.

Quite the opposite force is represented by the modern American university and its objective of democratic education, especially since the rapid evolutionary period following the Second World War. Democracy in education meant extending the liberating effects of a post-secondary education to every sector of society, mainly through expanding the scope and capacity of the modern university.

But the new functions and structure of the university presented a more complex environment within which the old teaching function had to evolve and adjust.

In his book, The University Teacher as Artist, Axelrod (1973) recognized that teaching styles in the modern university did not exist in a philosophical vacuum but were intimately related to the new structure and functions which had evolved. Utilizing a system theory analysis he was able to construct an accurate profile of the pivotal position the university plays in contemporary American society. Accordingly, the university is not just an educational institution; it is a supersystem, made up of interrelated and interdependent sub-systems. Faculty is in control of only one system, the degree system, which is the educational function the general public assumes is the only function of the university. But the university is also composed of systems functioning as, among other things, consulting agencies for business and all levels of government. In carrying out its new functions, the university has many times become a major employer in the community as well as serving as a major center for the arts and culture.

The teaching strategies used by contemporary faculties have evolved to some degree from philosophical speculation on educational theory, but mostly in response to the needs of the university to carry out its new functions as the problem solving and information processing agent of modern society. Faculties have been struggling to understand what had happened to the university and what their new position was within this structure. The main element which brought

the need to understand these changes to the forefront was the student movement of the 1960's, which had, at its core, a positive humanistic statement demanding more relevant teaching forms in the university in order to make its democratic thrust more of a reality.

For the purposes of this essay the complex of environmental factors influencing or setting limits on a set of human behaviors will be designated a "behavioral environment." This concept was originally a cultural concept integrating all environmental influences, both physically and psychologically, to explain certain cultural behaviors. (Hallowell, 1955). The behavioral environment concept is appropriate here because the university supersystem is so broad, and the boundaries between it and other systems of the society are so diffuse, that one cannot clearly identify all the forces pressuring faculties to evolve. Using the concept emphasizes that it is a <u>complex</u> of forces, rather than some simple force, which has resulted in the teaching forms found in the university today.

In response to this behavioral environment Axelrod developed an analytical classification scheme to help faculties understand their role in the modern university as well as to give them some basis for analysing future trends in teaching. That analysis identifies three major forms of teaching and they are presented in a dichotomously branched taxonomy. The three forms are <u>lecturing</u>, <u>didactic</u>, and <u>evocative</u> teaching modes.

Lecturing is the most common form of university instruction today; it has a rich tradition and it has evolved to a fine art in

the post World War II era. It combines the art of composition with the art of oral delivery, but it is not an art in the same sense of a teaching-artist because the lecturer does not actually know his students and lecturing does not require an interaction. It can be easily reduced to a video tape and played to a very large audience, as in instructional television, or played to no audience at all.

The rest of the teaching modes, evocative and didactic, do require interaction with students. However, in didactic modes independent inquiry on the part of the student is not required to complete the learning tasks set by the professor. The objectives of this mode include mastery of a definite body of information by memorization, or acquisition and mastery of specific motor kinetic skills by repetition and practice. Language instruction is the best example of this teaching mode. An excellent didactic teacher Axelrod describes as a craftsperson.

Evocative teaching modes are those which inquiry or discovery on the part of the student is required to successfully complete the learning tasks. That is, the mastery of the process of inquiry itself, by the student, is the object of the evocative teacher. Since this necessarily involves innovation, Axelrod designates an excellent evocative teacher as an artist.

Axelrod further breaks down the teacher-artist into specific prototypes, by examining the dominant relations between the three components of the teaching-learning process: the teacher, the learner, and the subject or skill. He explains how the teaching prototypes are derived through the dynamic interaction of these elemen

> The relationships between these three elements--what we might call their "fit"--are extensively varied. Typically, one of the elements moves to the center of the teaching-learning process, and the other two elements are expected to accommodate themselves to its demands and requirements. In the university classroom, it is the teaching style of the professor that determines which two of the elements are expected to make the greatest amount of accommodation and which one remains relatively stable. (p. 12)

The three evocative prototypes derived from the variables are the subject-oriented teacher, the instructor-centered teacher, and the student-centered teacher. In the subject-oriented prototype the teacher believes that the subject is fixed in that the facts, principles and presentation of the material must not be tampered with, and that both teachers and students must accommodate themselves to this mode. The clearest example of this is the discipline-oriented courses where for instance, a professor of Art History believes that any course entitled "The French Impressionists" would cover the same material in the same presentation regardless of the professor who teaches the course, the type of students taking the course, or even the location of the college. An interaction with the students is required to achieve the objectives set by the subject-oriented teacher:

> Their teaching is organized around their desire to help students master principles, concepts, analytic tools, theories, applications, and relevant facts. It is characterized by two main

features: an emphasis on cognitive knowledge, and the systemat: coverage of a given segment of that knowledge in each of their courses. (p. 13)

In the instructor-centered prototype, the teacher believes that her/his unique approach to the subject matter makes inquiry possible and that students should use her/him as a model. Thus the individuality, humanity and personality of the professor is the dominant element of this style forcing both subject matter and students to adjust accordingly.

Finally there is the prototype of student-centered teaching which grew out of the need to fulfill the democratic extension of post-secondary education to all sectors of society. The philosophy employed in such a style argues that the educational process itself is endangered if it cannot be adapted to diverse student populations. Furthermore, the primary object of education is student development and that teachers and subject matter should be made flexible to meet the student's real needs, that of a growing human being. Within this classification Axelrod identifies two variants of this prototype: one where the limits of the student's personal development are confined to the development of the student's mind, and the other, where the personal development of the whole student is emphasized, especially in the non-intellectual dimension where growth or development is necessary or desired.

Much of the concept of the student-centered teacher role was embodied in the position paper, A Prospectus for a New University College, generated for the State University of New York in February,

1971, and which led to the formation of Empire State College a few months later. Much of the paper was an attempt to define a different philosophy of education by articulating a new teaching role (later to be called Mentoring), a new type of student to be served by the college, and an expanded definition of what the learning process encompassed.

In terms of the new faculty member, it was clear that the general qualities were in the minds of the framers; she/he was to be highly qualified in a broad variety of ways, while willing to experiment and to take personal risks to achieve the objectives of the college:

> The new University College...will recruit faculty members who demonstrate: competency in relevant scholarship or research; intellectual rigor in performance; productive competence in problem-solving in research or professional activities; creativities in the arts; in public policy development in community service, or other work experiences; excellence in motivating others to learn; integrity of commitment to perceived values; and personal security to face risks of the unknown and change with some degree of self-esteem. (Prospectus, p. 21. Italics mine)

As to the new students, the Prospectus clearly sought out student populations not adequately served by the large university systems. And finally, the Prospectus called for a new educational agreement between the college and the student, and spelled out the educational process that would take place given this new cooperative

combination:

> The University College...will make the educational resources accessible to the student and guide and assist him in achieving an open process of learning. This process will place the responsibility for learning on the student in return for his freedom to pursue his education according to his individual needs and interests. (p. 5)
>
> He will learn for his own purposes and at his own pace within a community of his own choosing. (p. 7)
>
> On the personal side, the student will learn to undertake a sustained task over time, to explore, where possible, without the penalty of mistake. He will be encouraged to enjoy the play of learning experiences, freed from the kind of anxiety and tension that results in grimness and frustation. He will be enabled to see and understand his own emotions, to operate with a variety of language and symbol systems and to have a variety of direct creative aesthetic experiences. (p. 9)

When Empire State College opened its doors a few months later it presented the public with a new structure, an independent study program, to accomplish the educational objectives in the Prospectus. A faculty member, a mentor, was assigned to each student and the student and mentor worked on a one-to-one basis throughout the student's enrollment. Independent study meant that no classes were offered, but each set of studies was defined by a learning contract and followed by a narrative evaluation. The main task of independent study was that each student designed her/his own curriculum,

called a degree program, in conjunction with a mentor and with the approval of a faculty committee. Such a new structure gave the mentors the flexibility they needed to deliver education to new populations of students, while students took new responsibilities in exchange for a degree that was individually suited to their own specific needs.

The mentor role was conceived of as highly experimental at the outset with the idea that over a period of time many of the specifics of the mentor/student relationship would be worked out. In terms of the overall responsibilities the role was conceived of as being holistic as in Axelrod's description of the student-centered teaching prototype.

Two years after Empire State College opened, its Office of Research and Evaluation (ORE) began a study of mentoring to understand and follow the evolution of this experimental role. The research began with interviews of all forty-six full time faculty members to get faculty opinion on a variety of issues. On the basis of the interviews a questionnaire was developed and administered in the Spring of 1974, and the results were used by A. Paul Bradley, Jr. in his publication, The Empire State College Mentor: An Emerging Role (1975). Bradley's works are the best examples of the literature category dealing with the mentor role directly.

The publication itself deals with a wide variety of questions, but the ones that are appropriate for this essay are the mentors' descriptions of the mentor role. According to Bradley, there are five major components of the role: advisement, student intellectual

development, evaluation, professional development, and college development. The first three components will be looked at in more detail.

Although advisement of students is a role of most college faculties, in the one-to-one relationship of mentoring it emerges as a primary function. Bradley identifies three components: academic/vocational, personal, and ombudsmanship.

The only officially prescribed function of advisement in the mentor role is that of concern over student's academic and vocational plans. The study showed that students ask for counsel in "evaluating graduate school options, the current job situation, possible career orientation, and the like." Bradley also ended with the qualifier, "While not specifically trained for such advisement activities, mentors find that they are often the most accessible and concerned professionals who can listen and help." (p. 11)

The second part of advisement is what Bradley called "personal advisement," and he indicated that it was not always welcomed by mentors in the early years.

> 'ersonal advisement can involve any number of things that may te disturbing students: family concerns, financial affairs, business affairs, health. While these matters many feel should not enter an academic relationship, mentors sometimes find it necessary to listen and talk with students about such concerns before serious academic discussions are possible. In fact, for some students, their personal concerns (e.g., role of women) may be closely intertwined with their intellectual interests. (p. 11)

The third advisement function of the mentor role Bradley identified was that of ombudsmanship. Because the college had many locations throughout the state with primary administrative offices located at Saratoga Springs, New York, mentors had to untangle paper problems with financial aid, billing, and various academic forms. Bradley noted, "An important consequence of this type of mentor intervention is that the student confidence is gained. This in turn can improve the academic relationship." (p. 12)

Intellectual development is the second major function that mentors described of their role and Bradley breaks down that function into two further categories: mentor roles in degree program planning and in contract learning. As to degree program planning, the forms used by the College and the process required took several years to be developed, and the data in ORE's original study reflected a change in emphasis in this element. By 1974, degree program planning had become a major intellectual element, whereas before, contract learning was seen as the prime activity in intellectual development. Since then the College has taken more steps to emphasize and formalize the degree program planning process.

The mentor's role in the intellectual development of the student through the learning contract is the most time consuming, if not one of the most important components of the mentor's work day. Initially, mentors tended to describe their activities in two forms: the mentor as tutor, and the mentor as facilitator. . By tutoring a contract the mentor not only develops a specific set of learning activities, a sort of course description, but also acts as the tutor,

the "primary teacher," the "direct instructor," or, as it has been more accurately described, the "primary resource person." Tutors do not teach at Empire State College, since it is the student's primary responsibility to teach herself/himself. Tutors answer questions, discuss content, direct to further resources, and sometimes control developments within a specific and limited study component. Tutors also evaluate the results of a contract which Bradley categorized separately from intellectual development.

In the mentor as facilitator role, the mentor retains his overview function of the student's long term educational objectives, and takes primary responsibility for the contract design and final evaluation, but generally contracts someone else to act as tutor for the specific contract. To underscore this primary responsibility, tutors always report back to the primary mentor and it is up to the mentor to make all academic judgments. Bradley noted the necessity for broader skills for this type of mentoring:

> Mentors having this style often reach across several disciplines and thus deal with a variety of student objectives and interests. They act as broker by helping students connect with resources rather than interceding for them. (p. 13)

Finally, Bradley identified <u>evaluation</u> as the third major role component of mentoring. Evaluation is further divided into group functions on various academic committees such as assessment of degree programs, academic review for graduation, etc. Secondly, and most importantly, are contract evaluations. At the end of every learning contract a narrative evaluation describing how well the

student did in the contract must be filed in a formal document (the Contract Evaluation) in order for the student to receive credit for her/his new learnings. The evaluative comments normally follow an agreed upon criteria listed in the contract. The importance of this activity is seen in the fact that these documents monitor the student's progress in the program and form the basis of the student's transcript, along with a copy of the degree program.

This was not the end of Bradley's studies on mentoring for in 1978 he published a much broader study. This time he worked under the auspices of the Center for Individualized Education (CIE), located at Saratoga Springs, New York, and the study was expanded to cover many colleges all engaged in the independent study mode. Those colleges or programs ranged from the University Without Walls (University of Wisconsin) to the New College (University of Alabama). Since the new study enlarged the sphere of faculty activities in the ten schools studied, a new term was coined to cover a multiplicity of faculty titles; hence, the title of the report, The New Professional: A Report on Faculty in Individualized Education (1978).

Whe. it came to describing the teaching strategies of the "new professionals," Bradley reorganized his thinking and expanded his categories to include a total of eight roles, or "personal models of behavior." He retained the original dichotomy of bifurcating the mentor role into two general groupings, tutor and facilitator. Also, the basic definitions were retained; tutors were those who "used themselves as primary learning resources" (p. 49), while facilitators were defined as faculty who helped "students tap and

identify other resources" (p. 53). Evaluation, which in his 1975 publicationwas a separate category of intellectual development, became another one of the sub-categories, or styles, of either a tutor or facilitator. Thus the eight possible styles of the new professionals were serially described as: tutor/content; tutor/counselor; tutor/model; tutor/evaluator; facilitator/content; facilitator/experiential; facilitator/model; and facilitator/evaluator.

At this point a critical appraisal of Bradley's studies on mentoring is essential to understand some of the limitations embodied in his methodology. It was essential to break down mentoring into component parts so that he could develop a theory of "professional development" through stages, and this theory found its way into both the 1975 and the 1978 publications. However, Bradley did not begin from a holistic definition of mentoring, but rather, accepted the description "mentor" as it had been described administratively by Empire State College. There were many separate roles under this job description which did not conform with the concept of the mentor-counselor in the original Prospectus.

A major problem arose in the original breakdown of the mentor role into "tutor" and "facilitator" functions. These two variants were more derived from the internal structure of Empire State College (the original difference between mentoring at "Centers" and at "Units," now not much of a difference) than it represented distinct differences in the mentor/student relationship. This

problem reached major proportions in The New Professional, for the original classification scheme, when expanded into eight combinations, created some styles that were so artificial as to be merely personality types.

A good example of this problem is a juxtaposition of the tutor/model style with the facilitator/model type to understand the difference between a tutor and a facilitator. The tutor/model is one of the most exciting descriptions of a mentor's possible roles and requires the mentor to have a clear sense of herself/himself.

> the tutor/model feels a powerful responsibility to display work habits and a learning style that students will emulate... tutor/models tend to use personal experiences as a guide in advisement, degree program planning and completion...With shared educational experiences, student conferences become especially meaningful. (p. 52)

The facilitator/model description seems to be a condition, not a style, and a condition not clearly differentiated from the above description.

> [The facilitator/model] seems to be able to work effectively with students when no one else can: drop-outs, anti-establishment types, etc...He/She invites them to share his/her lifestyle which is an interesting one...Rather than be a model of intellectualization, [the facilitator/model] tends to be a model of individualization. (p. 54)

In short, the classifications of the new professionals into different styles tends to be artificial in that it does not help one understand

the essence of the mentor/student interaction.

A different methodology has been used by Rhoada Wald in her initial study of one phase of mentoring and may be characterized as looking at mentoring in its natural setting. Wald's paper is representative of the third type of literature, on specific aspects of non-traditional learning. Wald was studying how a learning contract gets formed and how individualized differences get incorporated into the academic process. She used systematic observation through audio and video taping of 33 conferences of the first mentor/student appointment, then described, coded and analysed the interaction, with reference to the literature of problem solving. (Wald, 1978)

Wald's research provided evidence to support four major trends in analysing the contract planning process. First, there seemed to be phases leading to contract design: an orientation phase whereby the student learns about the college and the mentor learns about the student; an identification of the student's objectives, both long term and short term; and the final design of the content based upon the information obtained in the previous phases. Second, in analysing the themes of discussion Wald found, "the strongest influence in planning the first contract was the personal history of the student. The consistency of this finding was striking" (p. 226). Third, specific contract objectives rather than long-range goals were emphasized. And fourth, in terms of distribution of control, the contract learning process is much more complex than the traditional teacher-centered structure: "The data indicated that both mentor and

student made some key decisions, but in a context that is compatible with the assumptions underlying individualized education" (p. 227).

Wald's conclusions pointed to a major difference between the student-centered teacher and the traditional teacher, and called for more extensive research along these lines: "Several additional findings that evolved from the study represent potentially rich sources for future research and development. Analysis of the mentor role is a natural follow-up" (p. 231).

The Mentor/Student Relationship

In order to expand the concept of mentoring found in the literature and get a new and more holistic perspective of the mentor/student relationship some research was undertaken to obtain descriptions of what this relationship entails. A research strategy was selected in interviewing four mentors. The first qualification for the interview was that the mentor selected must have exhibited a consciousness of the mentor role and must have demonstrated an ability to articulate aspects of that role in a creative manner. Secondly, all four mentors selected were working for ESC's Center for Statewide Programs, the division that is composed of smaller units, for several reasons. Bradley's studies excluded mentors from this division as this section of the College was new and it was experimentally untested. Since 1975, however, Statewide's experience has been solidified and provides a comprehensive view of mentoring. Statewide mentors exhibit all functions of the mentor role including the administrative functions of coordinating small units. The title, mentor/coordinator, is given to every mentor in

the division, which distinguishes it from most faculty positions in the rest of the College. Because the role places emphasis on holistic and integrative aspects of the job, Statewide mentors have come to call their role, "primary mentoring." Primary mentoring, then, is a relationship in which one mentor is associated with one student throughout the student's matriculation at the College and functions in all capacities for that student. This is distinct from mentoring students only in the mentor's disciplinary field.

In terms of demographics a balance was struck in several categories. Two women and two men were interviewed with the two women having completed their Ph.D's whereas the men had not at the time of the interviews. The range of experience in the mentor role was two to eight years, with the more experienced mentors having come into the role when the College was still experimenting with different variations of the strategy. The academic competencies ranged from Cultural Studies, through Arts, Religion, Science, History, to Philosophy.

The design of the interviews was semi-structured in that certain core questions were asked of each mentor but much open-endedness was provided so that each would feel free to articulate those aspects of the relationship that s/he felt were essential and meaningful. The interviews lasted from 45 minutes to 3 hours, and three of the four were taped.

The tapes were then transcribed; quotes were identified and catalogued as part of the analytical process. Although a great deal of information and topics were discussed, only those aspects were

used which met the objectives of the interviews. The object was to get different views on the mentor role, and to isolate and articulate the common elements. In refining the essence of the mentor/student interaction, the variables associated with mentoring at Empire State College had to be critically evaluated. Much of the information gathered formed a foundation for a much larger study on the philosophy of student-centered education.

One of the core questions that was asked of each mentor was how s/he evaluated her/himself in the mentoring role. All felt they were excellent mentors. One went further and said that one had to have a considerable amount of self-confidence in this job:

> I think I'm a good mentor. I think you need a lot of confidence in the fact that you are doing a good job. There are days where I come home and am very convinced that not only am I a bad mentor, but a terrible mentor, out there ruining lives. But that is not the dominant feeling. (Mentor Interview)

Another core question asked of all mentors was how they learned their jobs. This question was felt to be important because the answers reflected not only how variety and individual style were realized, but also how the broad limits of the job were transmitted to establish the territory of the behavioral environment.

All mentors reported that they got help being oriented to their jobs through the Dean and Associate Dean (academic dean) of the Center, through the use of a mentor handbook prepared by the Center, and especially through discussions with other faculty. A significant difference was that the two more experienced mentors did not have to

face the impact of a full student load the first day, but usually started with one student and slowly built up to a mandated load.

The two mentors who were hired after 1975 interited full students loads the first day. This day's work might have included having student conferences, making further educational arrangements with adjunct faculty and tutors, beginning to formulate and write formal documents, and, most importantly, making critical judgments and decisions. For these mentors, their philosophy of education emerged in time, over a longer period of time than the more experienced mentors--(in most cases over a year)--while they were functioning and delivering services. In short, mentors received an orientation from a variety of sources, which combined with their diverse backgrounds of personal and academic experience, in developing a style of mentoring unique to each individual. This process took a long time, and a minimum of one year full time seemed to be the rule of thumb.

Results

The end result of this research was a more generalized and holistic concept of mentoring. Accordingly, the uniqueness of the mentor/student relationship was that it combined academic progress with personal growth and development. Although each mentor described this philosophy in different terms, and the descriptions emerged in different ways in the interviews, this synthesis was clearly what the mentors described as the core of the educational experience of mentoring. One quotation taken from one of the interviews, epitomizes the rest:

> Meaning in the education comes at the juncture of personal history and intellectual development...A mentor is more than a talking head. He is morally obliged to say to a student that intellectual growth is not just a function of years. Twenty years of doing something is just twenty years of doing something. But until reflected upon it does not mean anything...
>
> One becomes aware that one's own history isn't simply circumstance. There is purpose. Even if someone has experienced prejudice or discrimination, one can begin to see that structure and see that it isn't simply blind fate. It has reasons and causal realities...This is where education becomes pretty risky. (Mentor Interview)

Much of the rest of the interviews had to do with testing the other variables associated with mentoring at Empire State College and at other non-traditional colleges. Those variables included the demographics of the student population, the specific documents and processes adopted by ESC and associated with independent study (contract learning and narrative evaluations), and the issue of individualized curricula. The objective was to determine which of the elements were essential to mentoring and which could be eliminated, making the definition more flexible. Also the analysis focussed on the elements which motivated a student to achieve academically and grow personally.

In terms of the student population ESC has found itself in somewhat of a puzzling situation. Growing out of the protests of the sixties for a more relevant and flexible educational structure, ESC

now finds itself a "college of working adults." The average age of the students fluctuates around the ages 37-40 and a majority of the students elect to enroll one-half time. One of the reasons for this population is the College's flexible schedule (no classes) and its attention to granting college credit by evaluation for proven college-level learnings. The paradox is that the College is populated by the very students who initially would not be caught dead protesting a college curriculum. All the mentors questioned stated plainly that the uniqueness of the mentor/student experience was not restricted to adult populations although ESC's particular brand of mentoring had adapted very well to adults. Clearly it was felt that mentoring could adapt to any set of students who desire that type of education.

One of the other specific aspects of mentoring at Empire State College is individualized curricula. It is a requirement that every student design her/his own curriculum in consultation with a mentor to be approved by a faculty committee and the Office of the Vice-President of Academic Affairs. It was generally felt that this process had a very positive educational value in making the student intimately acquainted with the learning process (in that each student had to become an expert in her/his own curriculum), and, combined with credit by evaluation, it was a process that integrated "learnings" from work experience into the academic context. However, the individualized curriculum was not felt to be essential to mentoring.

Related to the concept of individualized curriculum was the idea of contract learning and narrative evaluations which have been associated with mentoring in an independent study context. Questions

in the interviews were directed at determining the importance of these educational processes to the definition of mentoring derived from this study. Most of those interviewed initially made a distinction between the processes (contract learning and narrative evaluations) and the formal documents (Learning Contracts, Contract Evaluation, Learning Contract Outcome, Learning Contract Amendment, etc.). Most felt that contract learning served to externalize or articulate specific intellectual objectives and that the narrative evaluation made explicit how well the student met her/his objectives. Also a series of narrative evaluations documented very well the student's academic process. The use of these processes encourages the student to reflect upon the nature of academic learning.

> One of the things I do a lot of is encourage a lot of self-assessment, where a student at the end of a contract has to write his own assessment of what it is he learned. Students learn a lot trying to figure out what they learned...I do try to give them some sense of outcome, where [the learning] fits in their degree programs, where it fits in their interests. I try to make that clear...Narrative evaluations can be really hard to do. It's a lot easier to write down B+. (Mentor Interview)

However, it was clear that mentors do not generally address personal changes or developmental issues in either the contracts or the evaluations. The argument was made that a college transcript is not the place for comments on personal growth and development, and this is accepted generally throughout the College. However this attitude

does not deny that personal growth and development are major components of learning in a student-centered environment:

> If there are serious developmental issues, I seldom put that into the formal document. It is certainly a part of the next conference with the student. Narrative evaluations can be just character references. I think the paper is very deceptive. You can't codify a lot of those elements. (Mentor Interview)

One final question was asked of the mentors which aimed at determining whether some of the effects of mentoring, especially the motivation to grow intellectually and personally, could be achieved in a lecture situation. Generally the answer was in the affirmative. Although professing and mentoring are very different teaching strategies, especially in terms of delivery of information, the same integration could be achieved elsewhere if the students were to get some vital individual attention. One mentor put it as follows:

> Mentoring is not all that different from regular teaching and counseling, especially if the professor is used to students wandering into her/his office on a regular basis and sitting down to chat about whatever is bothering her/him that week. Also there are informal relationships--for instance, a student who always stops you after class--usually they are looking for something else. A lot of times they are looking for some confirmation that is not on an exam. (Mentor Interview)

The integrated goals in holistic education are much more difficult to achieve than mere intellectual development, yet many

students are attracted to a mentor/student relationship primarily because such a scheme incorporates academic development into one's personal life. The major effect on the student is increased motivation; students can generally see how each component enhances their own development. The mentors noted this effect on the students, and it had a positive effect on the mentor as well. The following statement pin-pointed this relationship:

> The motivation is so much higher when you think somebody cares. After reading many student questionnaires, and I was impressed at how often the students talked about the difference it made in his or her work to know that the mentor was genuinely interested. That they wanted them to succeed...made all the difference. (Mentor Interview)

In fact, it is the attitude or disposition toward caring which characterizes the mentor/student relationship and distinguishes it from the other modes of teaching. It is so central to this relationship that a detailed examination of what it is to care for an individual is examined here in more detail. Milton Mayeroff's study On Caring, provides a precise account of this relationship.

Mayeroff begins his study with a definition of what it is to care: "To care for another person, in the most significant sense, is to help him grow and actualize himself." (Mayeroff, 1971, p. 1) Caring then is not a goal, but a process in which growth is accomplished.

Growth in a caring relationship has many facets to it, but as Mayeroff defines it, there are components which involve intellectual

development (learning, infusion of new ideas) as well as personal growth (knowing oneself, becoming responsible for one's life). The form and direction of the growth are determined by the individual who is being cared for (student) and are not imposed by the person caring (mentor). The growth is also self-actualizing. Mayeroff describes growth both in affective and in cognitive areas:

> (Affective areas). To help another person to grow is at least to help him care for something or someone apart from himself, and it involves encouraging him and assisting him to find and create areas of his own in which he is able to care. Also, it is to help that other person to come to care for himself, and by becoming responsive to his own need to care to become responsible for his own life. (p. 10-11)
>
> (Cognitive areas). Growing includes learning to the degree that one is able, where learning is to be thought of primarily as a recreation of one's own person through the integration of new experiences and ideas, rather than as mere addition of information and technique. I grow by becoming more self-determining, by choosing my own values and ideals grounded in my own experience, instead of either simply conforming to the prevailing values or compulsively rejecting them. (p. 11)

This elucidation of growth in a caring relationship could easily be a description of a student-centered education in Axelrod's worldview, or could have found its way into the Prospectus, cited earlier. There is a close affinity between a student-centered educational

relationship and one that is caring.

There are some major ingredients of caring which help illuminate individual aspects of the mentor/student relationship. We will examine four of those components which have a direct bearing on caring in education. Those four are knowing, patience, trust and courage.

Knowing may be the most important ingredient in caring, especially in teaching, for it clearly distinguishes the mentor from other forms of professoring. The knowing mentor must be familiar with the student's world.

> To care for someone, I must know many things. I must know, for example, who the other is, what his powers and limitations are, what his needs are, and what is conducive to his growth; I must know how to respond to his needs, and what my own powers and limitations are. (Mayeroff, p. 13).

Mayeroff goes on to develop three aspects of knowing. First, explicit as opposed to implicit knowing: "To know something explicitly is to be unable to tell what we know...to know something implicitly is to be able to articulate it. We know more about a good friend than we can verbalize" (p. 14). Second, knowing that something is so as opposed to knowing how to do something: "A man may know much about the theory of teaching without being able to teach" (p. 14). This aspect of knowing shows the relationship between theory and practice and emphasizes that an integration of both is essential. Finally, there is the difference between knowing something directly and indirectly. In caring one knows the other

directly: "The caring teacher, for example, directly knows his student as an individual: he experiences him as someone in his own right, and not as a stereotype or as a means for his own self-aggrandizement" (p. 14).

Patience is a very important ingredient in the process of caring because the process is of primary importance and because self-actualization and growth must take place within organic limits. "The growth of a significant idea can no more be forced than the growth of a flower or a child" (Mayeroff, p. 17). This aspect of caring was reflected in the Prospectus and emphasized that the student will learn "at his own pace."

Trust is an important element in the caring relationship and is essential for an educational relationship that ends in self-actualization. Basically the mentor trusts the student to find his own way and it involves major professional and personal risks, and the courage to take those risks: "The caring teacher who trusts his students to find their own way in pursuing their own projects grounds such trust by providing the students with assistance, encouragement, and exposure to relevant and s imulating experiences"(p. 22). Mayeroff also warns that the person who cares must have gone through a process of actualization in having the confidence to trust herself/himself: "But only the man who trusts himself to grow, who is not trying to force himself to be something he thinks he is supposed to be will be able to trust another to grow" (p. 22).

Courage is important in the relationship because in any relationship that involves change, some elements that are known must

be relinquished in exchange for elements that are unknown. Such courage is informed by insight from past experiences and is sensitive to the present.

In education, then, a caring relationship involves many elements among whic' are knowing, patience, trust, and courage. The mentor (caring person) must have the confidence and knowledge to undertake such a venture and the student likewise must be able to be cared for. A mentor can not help a student develop personally if the student does not want it. Mentors must be flexible in handling a wide variety of students, and must be able to respond to each student's needs as they arise.

There is one other aspect of caring which creates a tension with the goals of modern education; in caring, the process (present) cannot be subordinated to the product (future). In modern education, tangible goal-oriented products (successful completion of a course, attainment of a high grade, receiving a degree) are often emphasized at the expense of the self-actualizing process.

If there is a goal in student-centered education it is to help foster the development of the individual. For many years it was felt that student-centered education meant modifying a standardized curriculum so each curriculum would be tailor-made for each student. Mentoring, however, means more than that; it is a unique relationship that aims at a synthesis of cognitive and affective growth to effect individualization. In some sense mentoring is not unlike parenting in that growth and individualization are the primary goals and parenthetically, is not essentially different from Mentor's role

in the Odyssey. When the roles of parent and teacher are misunderstood, individualization is subverted:

> If a parent's primary concern is to mold a child, or in basically having a child remain dependent upon him, then the child with good reason feels basically uncared for because he realizes he is not perceived as an individual in his own right. (Mayeroff, p. 39)

Thus mentoring, when liberated from its association with all types of non-traditional education, can be defined as a one-to-one relationship which aims at personal as well as intellectual development and mediated by the principles of caring. In short, a mentor is a master of growth.

Mentoring the Hearing Impaired

Much of the impetus for the developments in student-centered education has focused around the need to adapt conditions surrounding the baccalaureate degree to the individual student, especially in populations not having been reached by traditional programs. Non-traditional programs of the late 60's and 70's saw as their mission to reach new populations of students, including those who were place-bound, time-bound, and those with handicapping conditions. As a part of this essay on mentoring, an investigation into specialized programs for the hearing-impaired resulted in the discovery of at least one program involving a mentor/student relationship where the student population was hearing impaired. That specialized program existed for a brief time (1977-1979) and was a consortium of two colleges, Empire State College, Metropolitan Center (Manhattan) and

Gallaudet College (Washington, D.C.) with the assistance of La Guardia Community College's Program for Deaf Adults (Long Island City, New York). According to the proposal submitted to Gallaudet's Center for Continuing Education for seed money, an ESC Vice-President noted:

> In keeping with the mission statements of both Empire State College and Gallaudet College, it is proposed that a cooperative program between the two schools be initiated to serve deaf students. This program, whose beginning location would be in New York City, would serve as a prototype model for the pedagogic techniques of teaching deaf adults in a non-residential baccalaureate program.
>
> It is suggested that the program begin in a modest fashion in order to achieve two ends: to ascertain the receptiveness and appropriateness of such a program; and, to search for external funds that would allow a full program to flourish. (Letter, Roger Trumbore to Thomas Mayes, September 23, 1977)

A formal agreement between Gallaudet and ESC was signed, and the Program for the Deaf was begun in November of 1977. A half-time mentor was hired (Kristine Beeman) who met the normal criteria for mentorial faculty and who was also hearing-impaired. ESC was to orient the new faculty member to the College's independent study program, to all aspects of coordinating that program, and to developing mentoring skills in a short time. La Guardia College provided some office space and much needed clerical and technical assistance. Gallaudet provided money to pay for the mentor's

salary and provided many years' expertise in developing educational programs for the hearing impaired.

ESC's Program for the Deaf expired two years later and was slowly phased out of existence. In order to determine the weak elements in the program many documents were examined as well as interviews conducted with officials who were directly involved with the program: the Assistant Dean of the Metropolitan Center (Nancy Bunch) and Program Coordinator to La Gaurdia's Program for the Deaf (Glen Anderson).

Some weaknesses of the program were discovered in the investigation, but none of them had to do with any incompatibility between a hearing-impaired student population and the mentor/student relationship. First, the enrollment expectation was set too high too soon. A normal half load (15-18 student months/month) was expected, and when it did not materialize, gave the program an air of failure before it could become firmly established. Second, the hybrid role--mentor/coordinator--was too much for a part-time faculty member to absorb in a short period time. In addition to mentoring students, the role included recruitment, enrollment, providing support services and resources, financial aid counseling, and reporting to administrators on the condition of the program. What is difficult in the normal orientation of a mentor is doubly true for a mentor/coordinator in a specialized program: it was learned from the interviews that one cannot expect to feel comfortable in the role for at least one year, and this when one is working full time. Also, little time was scheduled by ESC to adapt the role

of mentor/coordinator to these specialized conditions.

Third, the amount of support services needed to deliver such a program to a hearing-impaired population was severely underestimated. Aside from normal A.I. (Accessory Instruction) money, resources were needed such as a teletypewriter (TTY) and other communication equipment, clerical help who were proficient in sign language, interpreters to interface between hearing-impaired students and normally hearing tutors, etc.

Finally, a problem was encountered by the very nature of the program being non-traditional. As Dean Stevenson stated (it):

> In a real sense her [the mentor's] role is exploratory and developmental. Higher education in general has no idea how to effectively address deaf people's needs or even what the nature of those needs may be. Different from any other coordinator, Kris is charting new waters...In our Deaf Project we often are faced with surprises. For example, some of our deaf prospects are suspicious of the individualized model itself. Having never attended "traditional" college, they are not disaffected with it. For some, college learning must come dressed in ivy-covered lecture halls or it's not the "real thing." In a sense they desire what their deafness denies them. (Letter, John Stevenson to Roger Trumbore, May 10, 1978)

The above analysis indicates that there were problems in setting up a specialized program for the hearing-impaired in ESC's non-traditional setting, but it does <u>not</u> indicate that there is any

inherent problem in mentoring the hearing-impaired using the concept of mentoring arrived at in this essay. This definition of mentoring emphasizes a specific educational relationship with specific objectives and principles. It is possible to envision mentoring a special population, such as the hearing-impaired, at a "traditional" institution, such as NTID.

A formal proposal to adapt a mentoring strategy to the NTID structure would require another complete project, and that project should be the product of several minds. What are presented here are some general thoughts on a proposed mentoring program at NTID with some consideration of how the mentorial interaction would benefit hearing-impaired students. It is one of many proposals that are possible given the mentoring characteristics developed in the previous sections.

The mentor role at NTID would involve at least three functions, although the functions would overlap since the role is holistic. They would include counseling activities both career and personal, academic and personal development through some individualized work for academic credit, and ombudsman functions. The continuity of the mentor/student relationship would be maintained from the student's initial enrollment through graduation.

Although a separate faculty category could be set up with a specialized mentoring function, it is strongly recommended that the existing faculty, professional staff and administrators voluntarily assume mentor roles in exchange for reduced workloads. Because a full mentoring load (i.e., 30 students) is exhausting, if loads

were kept to a reasonable number (for example - 6), it is hoped that the rewards for the mentor would far outweigh the liabilities, and professional burnout could be avoided. It is very much better for the students to be able to choose mentors from a wide variety of backgrounds, possessing different skills, and representing diverse personalities. The college might also benefit from increased collegiality when teaching and non-teaching faculty, administrators and professional staff share a common, part-time, function. For many positions, this would initiate direct involvement with students.

Mentors would facilitate students' academic and personal development through periodic projects for academic credit, which may be administered through learning contracts. The particular subject of the developmental project would be up to the mentor and student but could reflect an increased range of learning activities. Individualized work with mentors might include work in remedial areas, advanced studies, additional communication skills, areas for which classes are not available, specialized subjects, and exploratory subjects. The mentor/student relationship would add additional flexibility not currently available in a curriculum as well as a sense that the student's individuality is the focus of development.

In addition to a feeling of individualization, the students would benefit from learning those very skills necessary for success in an adult life, from interpersonal relations to problem solving. Some of the day-to-day problems of the mentor involve sorting out

-bureaucratic problems and other general ombudsman-like activities. However, in mentoring this is a learning and sharing experience because the mentor and student have the responsibility to solve the problems together. These problem-solving situations are helpful in establishing a trusting, working relationship as well as developing the skills which are used constantly in adult life--becoming aware of how problems are solved and decisions are made.

One other aspect of facilitating personal growth through mentoring involves the student's becoming aware of and mastering the developmental process itself. That process begins with the question "What do I really want to do in my life?" and goes through various analytical phases. It involves setting goals in a realistic framework and articulating the steps necessary to reach those goals. Students must also learn how to recognize when they have achieved the goals they have set, how well they have done in terms of strengths and weaknesses, and how to set new goals. In short, students should learn all the elements of self-evaluation. An awareness of the process of growth would serve them well after they leave NTID for a larger world.

Because of the holistic nature of the role, mentors would have to "know" a great deal and would have to continue to refine many skills in order to facilitate student development. Mentors should be aware of many levels of education from the academic curricula of the college to the most recent studies which increase relevant knowledge. In fact all the studies in the Foundations Program, from computer-assisted instruction, to problem-solving/

decision-making, motivation, models of human development, locus of control, inductive/deductive processing, and cross-cultural adaptation, etc. are the kinds of studies a mentor needs in order to improve her/his skills.

But most important, a mentor needs to know as much as s/he can about the world of the hearing-imparied, for the relationship is dependent on the mentor being able to "enter the world of the student." More than just mastering various modes of communication, mentors must be open to a variety of information sources including being able to take the risks involved with learning from the student. In this way both partners in the mentor/student relationship are actually involved with learning, including learning from each other.

Conclusion

The reintroduction of the mentor role in higher education has been associated with the non-traditional movement, but in this essay we have made a distinction between mentoring in the general sense and the myriad of faculty roles linked to non-traditional structures. When mentoring is understood as a set of principles promoting the development of the whole student rather than the facilitator of a non-traditional structure, then it becomes a more flexible and useful teaching strategy.

Many difficulties would be encountered in adapting a mentor role to NTID's "traditional" program, but the most formidable barrier has already been overcome in entertaining the idea of a change. In

democratizing the one-to-one educational relationship, it is the students who will benefit the most. Mentoring would enable hearing impaired students to become more prepared to live a full life, integrated into a world that is, at least in the beginning, not made in their own image.

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Reference List

Axelrod, J. The university teacher as artist: toward an aesthetics of teaching with emphasis on the humanities. San Francisco: Jossey-Bass, 1973.

Bradley, A.P., Jr. The Empire State College mentor: an emerging role. Saratoga Springs, New York: Empire State College, 1975.

Bradley, A.P., Jr. The new professional: a report on faculty in individualized education. Saratoga Springs, New York: Empire State College, 1958.

Hallowell, A.I. Culture and experience. Philadelphia: University of Pennsylvania Press, 1955.

Homer. Odyssey. Baltimore: Penguin, 1962.

Mayeroff, M. On caring. New York: Harper & Row, 1971.

Wald, R. Confronting the learning contract. Alternative Higher Education, 1978, 2, 223-231.

Annotated Bibliography

(references not cited in the text)

Axelrod, J., Freedman, M., Hatch, J., Katz, J., & Sandord, J. Search for relevance: the campus in crisis. San Francisco: Jossey-Bass, 1969. One of the first in the Jossey-Bass series on modern education. The focus of this work is on analysing the campus unrest of the 1960's and how some new models of education can respond constructively to the situation.

Boyer, E. L. Changing time requirements. In D. Vermilye (Ed.), Learner-centered reform. San Francisco: Jossey-Bass, 1977. Boyer's thesis in that American universities have always had rigid time requirements for the baccalaureate degree. Student-centered education should make this more flexible to different learning rates for each student.

Chickering, A. W., Education and Identity. San Francisco: Jossey-Bass, 1969. Looks at White and Erikson's concept of "identity" and identifies the seven major components which are associated with development in college students.

Clark, T. New academic programs/new professional roles: a description of individualized education and faculty development at eight institutions. Saratoga Springs, New York: Center for Individualized Education, 1975. Very similar to Bradley's concept of professional roles. See also Bradley, (1975).

Clark, T. Creating contract learning. In O. Milton (Ed.), On college teaching. San Francisco: Jossey-Bass, 1978. One of the most thorough accounts of the contract learning process. Clark defines eight roles of faculty in non-traditional education.

Cross, K. P. Beyond the open door. San Francisco: Jossey-Bass, 1971. A study of shifting student populations going to college and how to plan for them in higher education.

Gaff, J. New approaches to improve teaching. In D. Vermilye (Ed.), Learner-centered reform. San Francisco: Jossey-Bass, 1975. Gaff defines three different types of development in college teaching: Instructional, Faculty, and Organizational development.

Gould, S., and Cross, K. P., Explorations in nontraditional study. San Francisco: Jossey-Bass, 1972. The authors of this book review some of the events of the 1960's and outline some of the new innovations in higher education and their problems.

Gould, S. B. (Ed.). Diversity by design. San Francisco: Jossey-Bass, 1973. Examining five major components of non-traditional study, especially hapter 3, "Reshaping Institutions."

Hodgkinson, J. Evaluati n to improve performances. In D. Vermilye (Ed.), Learner-centered reform. San Francisco: Jossey-Bass, 1975. The use of evaluation in colleges using competency-based education and its need for clarity in the learning process.

Kerr, Clark. The uses of the university. Cambridge: Harvard University Press, 1963. A description of the future of the "multiversity" just prior to the beginning of the student movement.

Lehman, T. Evaluating contract learning. In D. Vermilye (Ed.), Learner-centered reform. San Francisco: Jossey-Bass, 1975. Reporting out on ESC's Student Experience Questionnaire given to random students in 1974. Includes the major benefits of contract learning.

Lindquist, J. Strategies for contract learning. In D. Vermilye (Ed.), Learner-centered reform. San Francisco: Jossey-Bass, 1975. A review of experiences in contract learning at New College, University of Alabama, and at ESC.

Mayhew, L. B., Legacy of the seventies. San Francisco: Jossey-Bass, 1977. In this book, Mayhew articulates a thesis in his analysis of the effects of the nontraditional movement in education. His thesis is that the nontraditional movement will not have long term significance in the future of education because it is tied to a conception of education as an agent for reforming society. Represents the conservative appraisal.

Meskill, V. P. Weekend college. In D. Vermilye (Ed.), Learner-centered reform. San Francisco: Jossey-Bass, 1975. Compares the C. W. Post weekend college program of Long Island University with other open university programs such as ESC.

Milton, O. & Associates. On college teaching. San Francisco: Jossey-Bass, 1978. An evaluation and guide to contemporary practices in teaching. Fourteen papers are included focusing on old techniques (lecturing) to the new techniques of computer programming.

O'Neil, R. Pros and cons of learner-centered reform. In D. Vermilye (Ed.), Learner-centered reform. San Francisco: Jossey-Bass, 1975. Critics of learner-centered reform maintain that making curriculum relevant is making it trivial and vulgar. Tries to resolve legitimate differences.

Vermilye, D. W. (Ed.). The future in the making. San Francisco: Jossey-Bass, 1973. There are twenty-two papers in this collection assessing the future of higher education with respect to political power.

Vermilye, D. W. (Ed.). Learner-centered reform. San Francisco: Jossey-Bass, 1977. There are twenty-one articles in this volume looking critically at learner-centered reform in education.

Vermilye, D. W. (Ed.). Relating work and education. San Francisco: Jossey-Bass, 1977. This volu e is an accumulation of twenty-four articles relating work to academic learning. Many recent articles on non-traditional education.

Wexler, J. G. Educating a whole person. In D. Vermilye (Ed.), Learner-centered reform. San Francisco: Jossey-Bass, 1975. Learner-centered reform is centered on a reappraisal of faculty in their own competitive field.